CMS Energy Corporation - Climate Change 2020

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

CMS Energy Corporation (CMS Energy) is an energy company operating primarily in Michigan. It is the parent holding company of several subsidiaries, including its principal subsidiary, Consumers Energy Company (Consumers Energy or Company), an electric and natural gas utility serving about 6.7 million of Michigan's 10 million residents, and CMS Enterprises Company (CMS Enterprises), primarily a domestic independent power producer. CMS Enterprises, through its subsidiaries and equity investments, is engaged in domestic independent power production, including the development and operation of renewable generation, and the marketing of independent power production.

This report is ONLY for the principal subsidiary of CMS Energy, Consumers Energy.

Consumers Energy acknowledges that the long term sustainability of our Company depends upon our ability to listen to our stakeholders and conduct business that promotes environmental health, increases societal value, and brings economic success so that we can provide safe, reliable, and affordable energy to our customers. This commitment is advanced by our focus on the triple bottom line: people, planet and prosperity.

In 2018, Consumers Energy committed to cutting carbon emissions from its owned generation by 80 percent from a 2005 baseline and eliminate coal for generating electricity by 2040. The Company also submitted its Integrated Resource Plan to the Michigan Public Service Commission that detailed our plan to exceed our goal by reducing our carbon emissions from owned generation by 90 percent by 2040. At the beginning of 2020, Consumers Energy announced a new and even more ambitious goal to achieve net zero carbon emissions by 2040. Unlike the prior goals, the net-zero goal includes both owned and purchased generation, including both power purchase agreements and energy market purchases. It is one of the most aggressive net-zero goals for a utility of Consumers Energy's size in the nation.

This report is made as of the date hereof and contains "forward-looking statements" as defined in Rule 3b-6 of the Securities Exchange Act of 1934, Rule 175 of the Securities Act of 1933, and relevant legal decisions. The forward-looking statements are subject to risks and uncertainties and should be considered in the context of the risk and other factors detailed in CMS Energy's and Consumers Energy's SEC filings. Forward-looking statements should be read in conjunction with "FORWARD-LOOKING STATEMENTS AND INFORMATION" and "RISK FACTORS" sections of CMS Energy's and Consumers Energy's most recent Form 10-K and as updated in reports CMS Energy and Consumers Energy file with the SEC. CMS Energy's and Consumers Energy's "FORWARD-LOOKING STATEMENTS AND INFORMATION" and "RISK FACTORS" sections are incorporated herein by reference and discuss important factors that could cause CMS Energy's and Consumers Energy's results to differ materially from those anticipated in such statements. CMS Energy and Consumers Energy undertake no obligation to update any of the information presented herein to reflect facts, events or circumstances after the date hereof.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2019	December 31 2019	Please select	<Not Applicable>

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Financial control

C-EU0.7

(C-EU0.7) Which part of the electric utilities value chain does your organization operate in? Select all that apply.

Row 1

Electric utilities value chain

Electricity generation
Transmission
Distribution

Other divisions

Gas storage, transmission and distribution
Smart grids / demand response

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Director on board	The Boards of Directors ("Board") of CMS Energy and Consumers Energy, made up of a number of directors with experience and knowledge of environmental issues, have the highest level of oversight of our public responsibility and sustainability practices. Review of these practices occur at the Board level with the Governance, Sustainability and Public Responsibility Committee ("GS&PR Committee") also being responsible for advising and assisting the Board with respect to our public responsibility and sustainability matters. This committee consists of three board members. In addition to Board oversight, management of CMS Energy and Consumers Energy has implemented an Environmental and Sustainability Council ("E&SC") in order to create a group of critical internal leaders who will work together to ensure our actions meet our environmental goals. The E&SC reports to the GS&PR Committee. In 2019, this committee approved our net zero methane emissions goal by 2030 that is integrated into our Natural Gas Delivery plan on file with the Michigan Public Service Commission.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<Not Applicable>	The Governance, Sustainability and Public Responsibility Committee reviews sustainability items including climate related issues, as needed, and at least annually. Management and our Board consider sustainability regularly in its decision making. The Governance, Sustainability and Public Responsibility Committee reviews the Company's sustainability programs, practices and strategies, including our reporting as it relates to engagement with shareholders and makes recommendations to the Board with respect to sustainability matters as appropriate.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	As important matters arise
President	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	As important matters arise
Risk committee	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	As important matters arise
Environment/ Sustainability manager	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	More frequently than quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

The Governance, Sustainability and Public Responsibility Committee (a committee of the Board of Directors) reviews sustainability and climate change items, as needed, and at least annually. Management and our Board consider sustainability regularly in its decision making. Our Governance, Sustainability and Public Responsibility Committee reviews the Company's sustainability programs, practices and strategies, including our reporting as it relates to engagement with shareholders and makes recommendations to the Board with respects to sustainability matters as appropriate.

In addition to Board oversight, in 2018 management implemented an E&SC, which is a group of critical internal leaders who will work together to ensure our actions match our environmental goals and discuss climate related issues.

A risk committee also exists that works with our Environmental Department to assess risks associated with climate related issues. Additionally, the Company has personnel responsible for sustainability that work across the Company to identify and address climate-related issues.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity inventivized	Comment
All employees	Non-monetary reward	Other (please specify) (Environmental performance)	The Company holds an annual sustainability awards ceremony where employees who have had a positive impact on the environmental are recognized for their efforts at our annual Sustainability Summit. This includes efforts around air, water, waste and land. Our 2019 Sustainability Award winner was recognized for implementing cable injection. Cable injection rejuvenates cables which reduces the need to replace cables. This effort reduces CO2 emissions because additional resources do not have to be consumed from producing new cable or installation.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	1	5	
Medium-term	5	10	
Long-term	10	20	

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Financial and strategic impact is defined as the cost of mitigating impacts to earnings and operating cash flow either through direct expense or with long term strategic initiatives that shape business decisions and direction of growth for the company. Impacts are quantified into 5 categories (i.e., manageable, moderate, major, severe, and catastrophic) which are quantified via a combination of financial (e.g., capital expense, O&M, etc.) and reputational (e.g., media, customer and investor impacts, duration of event, etc.) indicators. The level of response and mitigative measures (e.g., planning, resources, etc.) are determined by the risk category.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered
Direct operations

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
More than once a year

Time horizon(s) covered
Short-term
Medium-term
Long-term

Description of process
Short term- We have an annual review for risk mitigation where progress is tracked and improvements are made. There are various work streams that have been crafted specifically for risk mitigation that are closely monitored for progress. Additionally, our integrated resource planning (“IRP”) process modelling results (once approved) are binding for the next 3 years under Michigan’s rules, statutes and regulations for the IRP. Medium term- The Company has additional medium-term risk management processes with Board review. Our integrated resource planning (“IRP”) process identifies and quantifies the impact of various risks with regards to providing reliable, cost effective, and environmentally friendly energy to our customers. Consumers Energy maintains a balanced portfolio of resource options to address any risks that the Company may face. The IRP process addresses risk by evaluating numerous planning scenarios and sensitivities that potentially affect the business. For example, variables such as electric demand, fuel prices, state and federal mandates, carbon emission reduction scenarios and market conditions are altered to evaluate risk. On an asset level, physical climate change risks are assessed including the impact of changing weather on our operations. Risks from potential future environmental laws, rules and regulations are also evaluated. Additionally, our Natural Gas Delivery Plan provides a 10-year, holistic strategy of investments – some already underway – that will make our gas system even more safe, affordable, reliable and clean. Long term- Our integrated resource plan (IRP) process identifies, assesses and addresses climate-related risks and opportunities. Filed under Michigan’s rules, statutes and regulations for integrated resource planning, the IRP details our proposed strategy to meet customers’ long-term energy needs for years to come. We developed our plan by gathering input from a diverse group of key stakeholders to build a deeper understanding of our shared goals and modelling a variety of future scenarios. The IRP serves as a case study as to how our plans will address climate-related physical and transitional risks and opportunities through shifting our resources away from carbon emitting sources.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Regulations that address greenhouse gas (GHG) emissions are always taken into consideration when evaluating current risks related to operations including the determination of the appropriate level of controls to maintain compliance.
Emerging regulation	Relevant, always included	Regulations that address GHG emissions are always taken into consideration when evaluating future risks related to operations and our electric generation and gas delivery strategies.
Technology	Relevant, always included	Changes in technology and availability of technology can impact current and future operational plans and therefore are always assessed for risk and impact.
Legal	Relevant, always included	The Company always strives to maintain compliance with all laws and regulations. This is taken into consideration when evaluating risks associated with GHG generation.
Market	Relevant, always included	Understanding the market changes and new demands is critical for managing future and current risks to business success and sustainability.
Reputation	Relevant, always included	How the Company is perceived by its stakeholders can have a large impact on its ability to operate and grow through access to capital funds.
Acute physical	Relevant, always included	Acute risks that are event-driven, including increased severity of extreme weather events can increase operational and maintenance costs and are therefore included when assessing Company risks.
Chronic physical	Relevant, always included	Chronic risks including longer-term shifts in climate patterns can impact current and future capacity planning and infrastructure.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Risk 1

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation	Mandates on and regulation of existing products and services

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Future policy to reduce GHG emissions through either a cap and trade scheme or carbon fee or tax with an aggressive schedule may result in increased compliance costs.

Time horizon
Short-term

Likelihood
Unlikely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
1000000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Future cap and trade programs or carbon fees or tax could have an impact on our operations and the cost of electric generation from fossil fuels due to spending on emission allowance purchases or carbon fees or tax for compliance, or the capital cost of additional equipment. Costs of cleaner generating units or costs of advanced controls such as carbon capture and sequestration are estimated to exceed $1B/unit (costs would include capture of emissions and transportation to an appropriate sequestration site).

Cost of response to risk
474000000

Description of response and explanation of cost calculation
This risk is currently being managed through participation in both legislative and regulatory policy development, by strategy development, and by monitoring the development of control options through participation with industry research affiliations. The Company anticipates spending about $474 million to decommission its remaining coal-fired plants.

Comment

Identifier
Risk 2

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Current regulation	Mandates on and regulation of existing products and services

Primary potential financial impact
Increased capital expenditures

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
The U.S. Environmental Protection Agency (EPA) regulations over existing fossil fuel- fired units under Section 111(d) of the Clean Air Act is dependent on a state-run program. The Clean Power Plan, promulgated by the Obama Administration, was stayed by the Supreme Court of the United States in February 2016. In 2018, the Trump Administration proposed a replacement regulatory program, titled the Affordable Clean Energy (ACE) Rule, which focuses on utility investment in efficiency at the generation plants, subject to state direction. The Trump administration finalized the repeal of the Clean Power Plan and finalized the Affordable Clean Energy rule in June 2019. The ACE Rule requires States to develop a plan that establishes unit-specific CO2 emission limitations achievable by undertaking heat rate improvement projects, as well as through improved operating and maintenance practices. Consumers Energy is in the preliminary stage of working with the Michigan Department of Environment, Great Lakes, and Energy (EGLE) in developing a state plan, which is due no later than July 2022, with implementation of the plan required within 24 months or in accordance with an alternate compliance schedule. Consumers Energy does not have an estimated cost of compliance developed yet.

Time horizon
Short-term

Likelihood
Likely

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Being required to increase efficiency at existing plants could result in impacts to capital and O&M budgets.

Cost of response to risk
20000

Description of response and explanation of cost calculation
This risk is currently being managed through internal company resources, thus the cost of risk response represents a portion of air quality professionals' time and salary associated with focusing on participation in regulatory and strategy development. Another risk mitigant is related to our ability to mothball or retire select generating units and provide generation with new technology that meets any new requirements. This option is subject to regulatory approval and not captured in costs related here.

Comment

Identifier
Risk 3

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Technology	Substitution of existing products and services with lower emissions options

Primary potential financial impact
Increased capital expenditures

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Federal Regulations such as the New Source Performance Standard (NSPS) for new Electric Generating Units (EGUs) require a minimum performance standard for new electric generation facilities. Our current strategy does not anticipate construction of any new EGUs subject to this NSPS. However, if it did, future capacity planning must account for costs associated with the accompanying design/performance requirements.

Time horizon
Long-term

Likelihood
Very unlikely

Magnitude of impact
Medium-high

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Greenhouse Gas NSPS regulations for new sources would have a significant impact on our operations.

Cost of response to risk
0

Description of response and explanation of cost calculation
This risk is currently being managed through participation in both legislative and regulatory policy development, by strategy development, by business forecasting and by monitoring the development of control options through participation with industry research affiliations.

Comment
This risk is currently being managed through internal company resources' strategy development, business forecasting and by monitoring the development of regulatory and control options through participation with industry research affiliations.

Identifier
Risk 4

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Current regulation	Mandates on and regulation of existing products and services

Primary potential financial impact
Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Modifications at our existing facilities required to meet GHG regulations may trigger additional permitting requirements. The permitting process can be a very lengthy, litigious and costly.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
200000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Estimated financial cost impact is associated with hiring third-party consultant for NSR permitting for compliance with new GHG regulations. Additional costs would be incurred to make any modifications required due to such permitting.

Cost of response to risk
3500000

Description of response and explanation of cost calculation
Risks include not obtaining the requite permit(s), receiving a permit late and/or litigation costs associated with a contested permit. These risks could lead to compliance delays or operational restrictions however the cost of response to risk is estimated on the potential of incurring fines associated with delayed federal / state permitting (or lack thereof).

Comment

Identifier
Risk 5

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Chronic physical	Changes in precipitation patterns and extreme variability in weather patterns

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Snow and ice accumulation, coupled with strong winds from more frequent or severe storms may compromise infrastructure by damaging our distribution system equipment. Additionally, ice accumulation on wind turbine blades can also impact electricity generation. Similarly, increased flooding of our distribution system can cause damage.

Time horizon
Short-term

Likelihood
About as likely as not

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
92100000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Damages to our infrastructure due to more frequent and severe storms may increase the Company's service restoration operations and maintenance costs. In 2019, Consumers Energy spent $92.1 million on service restoration operating and maintenance activities. We estimate that in 2020 we will spend about $60 million in service restoration activities.

Cost of response to risk
975600000

Description of response and explanation of cost calculation
This risk can partly be managed by smart electric systems that have self-healing designs. This risk is also mitigated by maintaining our infrastructure in good working order. Consumers Energy's Smart Energy program, kicked off in 2007 and concluded in 2017 as planned. The Company spent $711M on the program, which was below the $750M budget. Also in 2019, the Company spent over $3.4 million on our reliability operations and maintenance program, $53.6 million on our line clearing operations and maintenance program, and $207.6 million on our reliability capital program.

Comment

Identifier
Risk 6

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Chronic physical	Rising sea levels

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Variations in Great Lakes and inland water levels may result in increased infrastructure and maintenance activities as well as fuel supply issues.

Time horizon
Short-term

Likelihood
About as likely as not

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
10000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Changes in the level of the Great Lakes and inland waters and tributaries could have a significant financial impact on our generating fleet. There is a current concern that high water levels on the Great Lakes could result in infrastructure maintenance costs for shoreline and lake structures at the JH Campbell Facility, the Ludington Pump Storage facility and our river hydros. High water levels are causing damage to licensed recreation sites that are maintained on the Great Lakes, resulting in cost for shoreline restoration and protection to continue providing recreation opportunities is estimated at $10M.

Cost of response to risk
0

Description of response and explanation of cost calculation
The Company is currently managing this risk by monitoring lake levels at our generating plants and also relies on the United States Army Corps of Engineers Detroit

District's water level reports and forecasts. There is no cost ($0) associated with the monitoring of lake levels at our generating plants. The Company utilizes the United States Army Corps of Engineers Detroit District's water level reports and forecasts at no cost. There are also current resources in place to complete risk assessment studies and shoreline restoration projects.

Comment

Identifier
Risk 7

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Chronic physical	Changes in precipitation patterns and extreme variability in weather patterns

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Variations in storm intensity may result in increased infrastructure and maintenance activities.

Time horizon
Long-term

Likelihood
About as likely as not

Magnitude of impact
High

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
140000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Changes in storm intensity and duration could have a significant financial impact on our hydro generating fleet. More intense storms have the potential to increase the probable maximum flood (PMF) that each dam has to pass through a combination of spill tubes, primary spillways, auxiliary spillways, and emergency spillway. The Federal Energy Regulatory Commission (FERC) is requiring that the PMF be examined once every ten years, which may result in the need to upsize existing spill capacity to safely pass large floods. As FERC revises rules, this may change the risk to complete additional spillway work. Risk of using an auxiliary or emergency spillway due to high flows is low. Cost for upsizing spillways is estimated at $140M. Financial impact of a dam failure is significantly more although very unlikely.

Cost of response to risk
2500000

Description of response and explanation of cost calculation
The Company is currently managing this risk through Part 12 D inspections, site specific risk assessments, updated hydrologic and hydraulic models, and safe operating practice. Annual spend associated with Part 12 D inspections, risk assessments and updated modelling is expected to cost on the order of $2.5M per year.

Comment

Identifier
Risk 8

Where in the value chain does the risk driver occur?
Downstream

Risk type & Primary climate-related risk driver

Reputation	Increased stakeholder concern or negative stakeholder feedback

Primary potential financial impact
Decreased access to capital

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Consumers Energy's efforts to mitigate climate change through policies and practices can affect the perception of our Company. If our reputation is damaged due to inadequate efforts surrounding climate change this may reduce our appeal in the investment community.

Time horizon
Short-term

Likelihood

Unlikely

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
300000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
There is a growing concern for investing in companies that address environmental issues such as climate change. Complete divestment a large shareholder was used for a corporate risk map impact calculation. Reputational impact was used to calculate an expected drop in stock price. This fell into the category of less than $300,000,000.

Cost of response to risk
975

Description of response and explanation of cost calculation
To manage this risk the Company communicates its efforts surrounding climate change through public reporting. The Company uses its Corporate Social Responsibility website as a tool to inform the public about its environmental efforts regarding climate change. Additionally, the Company discloses climate change information through its Securities and Exchange Commission (SEC) Form 10-K annual report as well as this response to the Carbon Disclosure Project (CDP), Climate Assessment Report, annual Sustainability Report and regular meetings with our investors. There are no additional costs ($0) associated with disclosing our efforts on climate change on the Company website or in its SEC Form 10-K annual report. However, the cost associated with personnel hours worked to achieve these disclosures has not been calculated. The Carbon Disclosure Project submittal fee is $975.

Comment

Identifier
Risk 8

Where in the value chain does the risk driver occur?
Downstream

Risk type & Primary climate-related risk driver

Chronic physical	Other, please specify (Regulatory, physical, and other risks driven by climate change)

Primary potential financial impact
Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Regulatory, physical, and other risks driven by climate change have the potential to impact the economy driving costs up for our business and our customers and consequently driving the demand for our goods and services down.

Time horizon
Short-term

Likelihood
More likely than not

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
28500000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Higher energy costs could result in more households not being able to afford their energy bills. In 2018, the Company's uncollectible expense was $28.5 million.

Cost of response to risk
20291202.69

Description of response and explanation of cost calculation
To help reduce the amount of uncollectible payments the Company provided funds to non-profit agencies and secured grants and other energy assistance from its customers through the Michigan Public Service Commission (MPSC). Additionally, the Company offers different payment plan options to its customers. In collaboration with community stakeholders, Consumers Energy promotes the availability and customer connections to access energy assistance the Company provided. The Company contributed $20,291,202.69 $20,296,796.28 in 20198 to the Michigan Energy Assistance Program.

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Opp1

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Energy source

Primary climate-related opportunity driver
Participation in carbon market

Primary potential financial impact
Returns on investment in low-emission technology

Company-specific description
The Company has participated in an EPA acid rain cap and trade program by selling emission allowances accrued from operational changes which reduced emissions. The Company has profited from these sales. There may be opportunities to capitalize on emission allowance sales from future cap and trade schemes targeting GHG emissions.

Time horizon
Short-term

Likelihood
About as likely as not

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Astute management of cap and trade schemes delivers good customer value and can increase our competitive position in the market. At this time, it is not possible to quantify the scope of financial implications due to the lack of known operating parameters of a yet to be developed trading program.

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation
We have identified opportunities to be competitive in a cap and trade schedule including negative cost of abatement opportunities such as plant efficiency, electric distribution line loss reductions, and energy efficiency for our customers. The capital invested depends upon the stringency of the policy.

Comment

Identifier
Opp2

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Energy source

Primary climate-related opportunity driver
Use of lower-emission sources of energy

Primary potential financial impact
Returns on investment in low-emission technology

Company-specific description
Efficiency standards for electric generation provide an opportunity to invest in our current generating fleet or to retire and build new low to zero carbon emitting sources. As a regulated utility, we recover a rate of return on investments in infrastructure which includes required emission control equipment or new generation equipment.

Time horizon
Medium-term

Likelihood
Very likely

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
1007000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The potential impact of product efficiency opportunities is dependent upon the stringency of the federal policy. Because these are case specific applications for our generating assets, it is not possible to determine a monetary value without assessing each application. However, the amount that the Company plans to spend in capital on solar and wind generation is estimated at $1,007,000,000 for 2019 to 2022.

Cost to realize opportunity
0

Strategy to realize opportunity and explanation of cost calculation
Our Clean Energy Plan is a living process that looks at policy, load, technology and fuel prices to name a few variables, several times per year, providing a picture of the most cost effective way to serve load. Changes in carbon regulation will not result in any additional costs ($0) to our strategic modelling processes.

Comment

Identifier
Opp3

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Energy source

Primary climate-related opportunity driver
Use of lower-emission sources of energy

Primary potential financial impact
Returns on investment in low-emission technology

Company-specific description
There are potential opportunities for our natural gas utility business. EPA regulations could drive the need for new natural gas infrastructure to support more gas fired electric generating units (EGUs). Investments in our natural gas distribution network may realize profit if infrastructure is needed.

Time horizon
Short-term

Likelihood
Very likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
640078

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Investments in the existing natural gas distribution system could increase the Company's assets. If new natural gas-fired electrical generation facilities come on-line in our service territory we will have the opportunity to invest in new natural gas infrastructure. In 2018, the Company increased revenues an estimated $640,078 from new customers for natural gas distribution.

Cost to realize opportunity
18300000

Strategy to realize opportunity and explanation of cost calculation
The Company is investing further in our natural gas infrastructure to realize this opportunity. In 20198, $30,200,000$18,300,000 was spent on the Company's customer attachment program on new main extensions.

Comment

Identifier
Opp4

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type
Products and services

Primary climate-related opportunity driver
Development and/or expansion of low emission goods and services

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
Change in weather can affect electric or gas load. Warmer winters result in a decreased demand for gas and conversely warmer summers mean an increase in demand for electricity.

Time horizon
Short-term

Likelihood
About as likely as not

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
1000000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
An increase in electricity or natural gas demand allows us to expand our supply and distribution systems. Our investment opportunity is dependent upon the magnitude of the change in temperature and could be as much as $1B.

Cost to realize opportunity
0

Strategy to realize opportunity and explanation of cost calculation
We are supportive of revenue decoupling on both the electric and gas sides of the business, which effectively mitigate weather risk by truing up projected sales with actual sales and giving customers refunds or collecting more revenue accordingly. We are authorized to do this on the gas side only, decoupling on the electric side is not currently authorized. There is no additional cost ($0) to manage this opportunity through our current business processes.

Comment

Identifier
Opp5

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Products and services

Primary climate-related opportunity driver
Development of climate adaptation, resilience and insurance risk solutions

Primary potential financial impact
Other, please specify (Returns on investment in energy reliability)

Company-specific description
Snow and ice from more frequent or severe storms may compromise infrastructure by damaging our distribution system equipment. There may be new investment opportunities associated with the solutions to these problems.

Time horizon
Short-term

Likelihood
About as likely as not

Magnitude of impact
Medium-high

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
31700000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure

The deployment of a complete electric underground distribution system would roughly cost around $31.7 billion. This is based on an adjusted line mileage of 56,676 miles of electric underground lines at a rough cost of $561,000 per mile.

Cost to realize opportunity
264600000

Strategy to realize opportunity and explanation of cost calculation
At the current time, we are investing in our infrastructure to assure the reliable supply of electricity and natural gas. In 2019, the Company spent over $3.4 million on our reliability operations and maintenance program, $53.6 million on our line clearing operations and maintenance program, and $207.6 million on our reliability capital program.

Comment

Identifier
Opp6

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Markets

Primary climate-related opportunity driver
Other, please specify (Reputation)

Primary potential financial impact
Increased access to capital

Company-specific description
Positive perceptions driven by our response to climate change may increase the appeal of our business in the investment community.

Time horizon
Short-term

Likelihood
Likely

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
4000000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
There is a growing concern for investing in companies that address environmental issues such as climate change. Over 50% of CMS Energy's common stock is owned by signatories of the United Nation's Principles for Responsible Investing which represents over $4B dollars. It is important for our Company that investors are confident in our business now and in the future.

Cost to realize opportunity
975

Strategy to realize opportunity and explanation of cost calculation
The Company manages this risk with its efforts around reducing its carbon through building efficiency, electric vehicle incentives, transitioning our generation fleet to a lower carbon intensity rating, behavioral change support, and energy efficiency processes. Additionally, the Company reports out on these efforts through our Corporate Social Responsibility Webpage, SEC Form 10K Annual Report, our EEI/AGA ESG Report, Climate Assessment Report, and the CDP to communicate them to the investment community. There are no additional costs ($0) associated with disclosing our efforts on climate change on the Company website or in its SEC Form 10-K annual report. However, the cost associated with personnel hours worked to achieve these disclosures has not been calculated. The Carbon Disclosure Project submittal fee is $975.

Comment

Identifier
Opp7

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Products and services

Primary climate-related opportunity driver
Development and/or expansion of low emission goods and services

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
Positive perceptions driven by our response to climate change may increase the appeal of our business in the investment community. Customers may perceive their energy usage as a contributor to climate change. This perception may cause our customers to demand new lower carbon products and services.

Time horizon
Short-term

Likelihood
More likely than not

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
764520

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Our Green Generation® program offers our customers the opportunity to make contributions towards the purchases of renewable energy. Customers can either make purchases that match their kilowatt-hour usage at the 100% level, or can purchase in blocks of 150 kilowatt-hours. At the end of 2019, the Green Generation® program generated about $764,520 in revenue.

Cost to realize opportunity
156076

Strategy to realize opportunity and explanation of cost calculation
The Company managed this opportunity by marketing the program to our customers. We historically communicated with these customers through a number of different methods, including direct mail, email, radio and television, and web banner ads. The Green Generation® direct mail marketing efforts were generally focused on residential customers – particularly those whom demonstrate an interest in renewable energy and the environment – as these customers were more likely to sign up for the Green Generation® program. The program closed to new enrolments on April 5, 2019. Company spent about $156,076 on administration for this program in 2019.

Comment

Identifier
Opp8

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Products and services

Primary climate-related opportunity driver
Development and/or expansion of low emission goods and services

Primary potential financial impact
Increased revenues through access to new and emerging markets

Company-specific description
Positive perceptions driven by our response to climate change may increase the appeal of our business in the investment community. Customers may perceive their energy usage as a contributor to climate change. This perception may cause our customers to demand new lower carbon products and services.

Time horizon
Short-term

Likelihood
More likely than not

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
505127

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Our Solar Gardens program offers our customers the opportunity to subscribe to blocks of renewable energy. At the end of 2019, the Solar Gardens program generated about $505,127 in revenue.

Cost to realize opportunity
280532

Strategy to realize opportunity and explanation of cost calculation
The Company managed this opportunity by marketing the program to our customers. We communicate with these customers through a number of different methods, including direct mail, email, radio and television, and web banner ads. The Solar Gardens email marketing efforts were generally focused on residential customers – particularly those whom demonstrate an interest in renewable energy and the environment – as these customers were more likely to sign up for the Solar Gardens program. Company spent about $280,532 on marketing and administration for this program in 2019.

Comment

Identifier

Opp9

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Products and services

Primary climate-related opportunity driver
Development and/or expansion of low emission goods and services

Primary potential financial impact
Increased revenues through access to new and emerging markets

Company-specific description
Positive perceptions driven by our response to climate change may increase the appeal of our business in the investment community. Customers may perceive their energy usage as a contributor to climate change. This perception may cause our customers to demand new lower carbon products and services.

Time horizon
Short-term

Likelihood
More likely than not

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
5280361

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Our Large Customer Renewable Energy Pilot program offers our largest customers the opportunity to offset their usage with renewable energy. At the end of 2019, the Large Customer Renewable Energy Pilot program generated about $5,280,361 in revenue.

Cost to realize opportunity
88964

Strategy to realize opportunity and explanation of cost calculation
The Company managed this opportunity listening to the needs of our largest customers and developing innovative programs to meet those needs. We communicate with these customers through our corporate account managers. Company spent about $88,964 on marketing and administration for this program in 2019.

Comment

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?
Yes, and we have developed a low-carbon transition plan

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform its strategy?
Yes, qualitative and quantitative

C3.1b

(C3.1b) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios and models applied	Details
Other, please specify (Aurora)	The Company utilizes a capacity expansion model called "Aurora" to determine the most economic resources necessary to meet long-term (0-20 years) customer energy and demand needs. As part of this model, the Company is required by the Michigan Public service Commission to evaluate an Environmental Policy scenario or future world that assumes climate policies are in place that constrain production from carbon emitting resources. The requirements of this scenario are to reduce or cap carbon production to serve the Company's customers by 30% from 2005 levels by the year 2030 and a sensitivity that reduces or caps carbon production to serve Company customers by 50% from 2005 levels by the year 2030. This process contributes to the development of our integrated resource plan (IRP).

C3.1d

(C3.1d) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Climate-related risks and opportunities have influenced many of Consumers Energy's products and services. For example, we have a Solar Gardens program that allows people to purchase a share of the energy associated with one of the Company's solar installations. Other programs exist related to energy efficiency, demand response, net metering, special rates for electric vehicles, and programs to reduce peak demand.
Supply chain and/or value chain	Yes	Consumers Energy has begun having discussions with suppliers of solar panels that have lower lifecycle emissions associated with their production. Similarly, Consumers Energy is participating in the Natural Gas Sustainability Initiative, which focuses on reducing emissions in the natural gas value chain.
Investment in R&D	Yes	Consumers Energy is investigating low-to-zero carbon electric generation technologies, carbon offsets, and methods of reducing carbon emissions associated with natural gas business, including for emissions from customer end-use of natural gas product. We are also considering participating in a larger group of entities in natural gas decarbonization studies. These efforts are very important to the Company's long-term strategy to reduce its emissions. We also have several pilot programs for end-use customers to help them reduce their electricity and natural gas use, which reduces the associated emissions.
Operations	Yes	Consumers Energy has a program to harden its system against increased storm and precipitation effects over the coming years. In addition, we are upgrading our hydroelectric dam infrastructure and evaluating our dams to confirm that they can handle projected future high rain events, and associated flooding.

C3.1e

(C3.1e) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Capital allocation	Consumers Energy's Integrated Resource Plan (IRP), which was approved by the Michigan Public Service Commission in 2019, is specifically designed to reduce climate risks posed by Consumers Energy. It has Consumers Energy retiring all coal-fired generation no later than 2040 and building only carbon-free generation in the future, including over 6,000 MW of solar and other carbon-free generation. This plan both reduces Consumers' climate-related risk, and create an opportunity for investment by the Company. Separate from our IRP, Consumers Energy in 2018 entered into the first syndicated sustainability-linked revolving credit facilities for a U.S. borrower. The aggregate $1.4 billion of new credit facilities allow CMS to reduce its interest rate by meeting targets related to environmental sustainability, specifically renewable energy generation.

C3.1f

(C3.1f) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

(need to complete)

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number
Abs 1

Year target was set
2018

Target coverage
Company-wide

Scope(s) (or Scope 3 category)
Scope 3 (downstream)

Base year
2018

Covered emissions in base year (metric tons CO2e)
155667

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)
1

Target year
2019

Targeted reduction from base year (%)
0.75

Covered emissions in target year (metric tons CO2e) [auto-calculated]
154499.4975

Covered emissions in reporting year (metric tons CO2e)
149449

% of target achieved [auto-calculated]
532.589865974591

Target status in reporting year
Revised

Is this a science-based target?
No, but we anticipate setting one in the next 2 years

Please explain (including target coverage)
Consumers Energy's original energy efficiency targets sunset in 2016. The new statutory targets set by the Michigan 2016 energy law are 0.75% of the prior year's gas sales. Data reported reflects the associated CO2e emission reductions from the targeted prior year's annual natural gas sales as achieved by our energy efficiency programs. In 2019, natural gas reductions due to efficiency efforts exceeded our gas savings target by 40% resulting in 149,449 metric tons of CO2e emissions reductions due to this program which is roughly 1% reduction of the reported Scope 3, category 11 use of sold products emissions.

Target reference number
Abs 2

Year target was set
2018

Target coverage
Company-wide

Scope(s) (or Scope 3 category)
Scope 1

Base year
2018

Covered emissions in base year (metric tons CO2e)
351652

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)
2.67

Target year
2019

Targeted reduction from base year (%)
1

Covered emissions in target year (metric tons CO2e) [auto-calculated]
348135.48

Covered emissions in reporting year (metric tons CO2e)
339306

% of target achieved [auto-calculated]
351.085732485525

Target status in reporting year
New

Is this a science-based target?
No, but we anticipate setting one in the next 2 years

Please explain (including target coverage)
Consumers Energy's original energy efficiency targets sunset in 2016. The new statutory targets set by the Michigan 2016 energy law are 1% of the prior year's electric sales. Data reported reflects the associated CO2e emission reductions from the electric sales reductions achieved by our energy efficiency programs. In 2019, electric sales reductions due to efficiency efforts exceeded our electric sales target by 76% resulting in 339,306 metric tons of CO2e emissions reductions due to this program which is roughly 2.51% reduction of the reported Scope 1 total CO2e emissions.

Target reference number
Abs 3

Year target was set
2018

Target coverage
Company-wide

Scope(s) (or Scope 3 category)
Scope 1

Base year
2005

Covered emissions in base year (metric tons CO2e)
20536528.8

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)
100

Target year
2040

Targeted reduction from base year (%)
80

Covered emissions in target year (metric tons CO2e) [auto-calculated]
4107305.76

Covered emissions in reporting year (metric tons CO2e)
12995313

% of target achieved [auto-calculated]
45.9012321011134

Target status in reporting year
Underway

Is this a science-based target?
No, but we anticipate setting one in the next 2 years

Please explain (including target coverage)
In the past five years, Consumers Energy has created a cleaner, more sustainable energy future for the state by taking a leadership position in reducing air emissions, reducing water usage, saving landfill space, and boosting the amount of renewable energy supplied to customers. Consumers Energy's goal in 2019 was to meet Michigan's energy needs by reducing carbon emissions by 80% and no longer using coal to generate electricity by 2040. The covered emissions reported in 2019 thus represent the electric utility portion of Scope 1 emissions. To meet this goal, we believe that more than 40% of the energy produced could come from renewable sources and energy storage by 2040. This continued transformation to cleaner fuel sources is part of a long-term strategic commitment to protect the planet and in early 2020 our clean energy goal was revised to achieve net-zero carbon emissions by 2040.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?
Target(s) to increase low-carbon energy consumption or production
Target(s) to reduce methane emissions
Other climate-related target(s)

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number
Low 1

Year target was set
2009

Target coverage
Company-wide

Target type: absolute or intensity
Absolute

Target type: energy carrier
Electricity

Target type: activity
Production

Target type: energy source
Renewable energy source(s) only

Metric (target numerator if reporting an intensity target)
Please select

Target denominator (intensity targets only)
<Not Applicable>

Base year
2009

Figure or percentage in base year
0

Target year
2021

Figure or percentage in target year
15

Figure or percentage in reporting year
12.5

% of target achieved [auto-calculated]
83.3333333333334

Target status in reporting year
Underway

Is this target part of an emissions target?
In 2016 the State of Michigan revised its renewable energy goal through legislation. The new program establishes a 15% statewide target by 2021.

Is this target part of an overarching initiative?
Other, please specify

Please explain (including target coverage)
State mandate

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number
Oth 1

Year target was set
2015

Target coverage
Business division

Target type: absolute or intensity
Absolute

Target type: category & Metric (target numerator if reporting an intensity target)
Please select

Target denominator (intensity targets only)
<Not Applicable>

Base year
2016

Figure or percentage in base year
0

Target year
2021

Figure or percentage in target year
3

Figure or percentage in reporting year
2.64

% of target achieved [auto-calculated]
88

Target status in reporting year
Underway

Is this target part of an emissions target?
Yes - In October 2019, Consumers set a goal of net-zero methane emissions from its natural gas delivery system by 2030.

Is this target part of an overarching initiative?
No, it's not part of an overarching initiative

Please explain (including target coverage)
Consumers' Methane Reduction Plan, released in November 2019, outlines its plan to reach this net-zero emissions goal. Consumers plans to reduce methane emissions from its system by about 80 percent by accelerating the replacement of aging pipe, rehabilitating or retiring outdated infrastructure, and adopting new technologies and practices. The remaining emissions will be eliminated by purchasing and/or producing renewable natural gas. The base year has been established as 2012 and thus represents zero percent reduction. In 2019, we achieved a 12% reduction from the baseline year.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.
Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	3	115850
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Fugitive emissions reductions	Oil/natural gas methane leak capture/prevention

Estimated annual CO2e savings (metric tonnes CO2e)
3393

Scope(s)
Scope 3

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
828327

Investment required (unit currency – as specified in C0.4)
692372

Payback period
<1 year

Estimated lifetime of the initiative
>30 years

Comment
Our Vintage Service Replacement (VSR) Program targets higher risk distribution services to be replaced. Through this effort, in 2019 we reduced potential methane emissions by 3,398 Mscf, which equals ~1,631 metric tons of CO2e. Additional main and service replacement projects allowed us to further reduce potential methane emissions by another 3,671 Mscf (~1,762 MT CO2e).

Initiative category & Initiative type

Fugitive emissions reductions	Oil/natural gas methane leak capture/prevention

Estimated annual CO2e savings (metric tonnes CO2e)
110206

Scope(s)
Scope 3

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
845880

Investment required (unit currency – as specified in C0.4)
580220

Payback period
<1 year

Estimated lifetime of the initiative
>30 years

Comment
On our natural gas transmission projects, we utilize pump-down techniques to lower gas line pressure using temporary compression and/or movement of gas elsewhere onto our system. This practice resulted in a reduction of methane emissions 229,596 Mscf, which equals ~110,206 MT CO2e.

Initiative category & Initiative type

Fugitive emissions reductions	Oil/natural gas methane leak capture/prevention

Estimated annual CO2e savings (metric tonnes CO2e)
2251

Scope(s)
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
16415

Investment required (unit currency – as specified in C0.4)
85827480

Payback period
21-25 years

Estimated lifetime of the initiative
>30 years

Comment
In 2016, Consumers Energy also became a founding member in EPA's voluntary Methane Challenge program, where members commit to utilizing best management practices to reduce fugitive methane losses from distribution and transmission processes. Our methane challenge commitment is to reduce cast iron and unprotected steel mains at a minimum rate of 3% per year, for a 5-year period. This is a voluntary initiative that reduces Scope 2 emissions. Through this effort, in 2019 we reduced potential methane emissions by 4,690 Mscf, or ~2,251 MT CO2e.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	Compliance with regulatory requirements receives priority funding.
Financial optimization calculations	Energy efficiency activities within our facilities are determined based on the return on the investment.
Internal price on carbon	The estimated cost of carbon may be incorporated into financial investment decisions.
Dedicated budget for energy efficiency	Funding to spur development and deployment of smart-meters, LEED certified buildings and electric vehicle charging stations is intended to help drive the development and deployment of clean and efficient energy and remain current with the industry direction.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?
Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation
Product

Description of product/Group of products
Net metering

Are these low-carbon product(s) or do they enable avoided emissions?
Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions
Other, please specify (Direct GHG offset calculation)

% revenue from low carbon product(s) in the reporting year
0

% of total portfolio value
<Not Applicable>

Asset classes/ product types
<Not Applicable>

Comment

Level of aggregation
Product

Description of product/Group of products
Continuous energy monitoring for identifying and reducing energy consumption.

Are these low-carbon product(s) or do they enable avoided emissions?
Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions
Other, please specify (Direct GHG offset calculation)

% revenue from low carbon product(s) in the reporting year
0

% of total portfolio value
<Not Applicable>

Asset classes/ product types
<Not Applicable>

Comment
The Virtual Energy Engineer service gives customers insights into their energy consumption that allow for the identification and reduction of energy usage, which minimalizes their carbon footprint and improves their bottom line.

Level of aggregation
Product

Description of product/Group of products
Experimental Advanced Renewable Energy Program.

Are these low-carbon product(s) or do they enable avoided emissions?
Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions
Other, please specify (Direct GHG offset calculation)

% revenue from low carbon product(s) in the reporting year
0

% of total portfolio value
<Not Applicable>

Asset classes/ product types
<Not Applicable>

Comment
The Company does not receive any revenue from this program. The Company pays customers for their distributed renewable generation. This program represents 6.4MW installed through over 379 contracts.

Level of aggregation
Product

Description of product/Group of products
Industrial Demand Response

Are these low-carbon product(s) or do they enable avoided emissions?
Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions
Other, please specify (Direct GHG offset calculation)

% revenue from low carbon product(s) in the reporting year
0

% of total portfolio value
<Not Applicable>

Asset classes/ product types
<Not Applicable>

Comment
The commercial and Industrial Demand Response program calls on our business customers to reduce electric load during peak times in the summer. This prevents Consumers Energy from purchasing additional load generated from non-renewable resources. Demand Response supports the 2016 Energy law with our renewable energy standard increasing from 10 percent to 15 percent by 2021. This program does not generate revenue but rather reduces Company costs.

C-EU4.6

(C-EU4.6) Describe your organization's efforts to reduce methane emissions from your activities.

The Company focuses on optimizing combustion processes as well as eliminating leaks occurring from infrastructure that delivers natural gas to our combustion facilities and residential customers.

In 2016, Consumers Energy became a founding member in EPA's voluntary Methane Challenge program, where members commit to utilizing best management practices to reduce fugitive methane losses from distribution and transmission processes. Our methane challenge commitment is to reduce cast iron and unprotected steel mains at a minimum rate of 3% annually, target at 5-year time frame. This was reported in Section C4.2.

In addition to Consumers' normal distribution main replacement projects, our Enhanced Infrastructure Replacement Program (EIRP) targets higher risk distribution mains and services to be replaced which further reduces potential methane emissions.

In addition, on our transmission pipeline projects, we utilize pump-down techniques to lower gas line pressure using temporary compression and/or movement of gas elsewhere onto our system to avoid emissions from venting gas.

In total, 2019 methane emissions avoided were 114,088 CO2e metric tons.

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start
January 1 2009

Base year end
December 31 2009

Base year emissions (metric tons CO2e)
18196261

Comment

Scope 2 (location-based)

Base year start
January 1 2009

Base year end
December 31 2009

Base year emissions (metric tons CO2e)
44330

Comment

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
(need to complete)

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.
US EPA Mandatory Greenhouse Gas Reporting Rule

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
13509175

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
Scope 1 emissions cover Consumers Energy's electric generation and natural gas compressor stations sites, and associated fugitive emissions from electric and gas operations. Additionally, included are emissions from company-owned vehicles' (business mileage) and emissions associated from heating corporate office buildings where natural gas is provided by another utility. De minimis emissions that have been excluded include fugitive emissions from refrigerant (HFCs) usage.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based
We are reporting a Scope 2, location-based figure

Scope 2, market-based
We have no operations where we are able to access electricity supplier emission factors or residual emissions factors and are unable to report a Scope 2, market-based figure

Comment
GHG emissions are calculated for Scope 2 using default regional emission factors (from eGRID Subregion RFC Michigan) for energy delivered through the grid and which is purchased from another utility provider.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based
3499

Scope 2, market-based (if applicable)
<Not Applicable>

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
Scope 2 emissions are calculated for corporate buildings which purchase electricity from another utility provider.

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?
Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source
Refrigerant (HFC) emissions

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)
Emissions are not relevant

Explain why this source is excluded
GHGs associated with refrigerant usage are contained in closed loop applications. Any emissions associated with these refrigerant systems would be fugitive leakage and minimal in nature, thus HFCs are considered de minimus (i.e., less than 1% of Scope 1 emissions) and not required to be reported.

Source
Emergency Operations

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)
Emissions are not relevant

Explain why this source is excluded
De minimis emissions associated with emergency operations, such as emergency generators, are not reported in 40 CFR Part 98 and thus not included in Scope 1 or Scope 2.

Source
Scope 2 - Indirect emissions associated with consumed energy

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
Emissions are relevant but not yet calculated

Relevance of market-based Scope 2 emissions from this source (if applicable)
Emissions are not relevant

Explain why this source is excluded
Electric consumption from small miscellaneous Consumers Energy sites served by other utility providers was not able to be collected and evaluated, however it is considered de minimis in relation to total Scope 1 and Scope 2 reported emissions.

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Not evaluated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Have not evaluated what might be relevant to the business, however it is assumed that Consumers Energy has little influence on potential emissions reductions for this category.

Capital goods

Evaluation status
Not evaluated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Have not evaluated what might be relevant to the business, however it is assumed that Consumers Energy has little influence on potential emissions reductions for this category.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status
Relevant, calculated

Metric tonnes CO2e
5149732

Emissions calculation methodology
Emissions from Power Purchase Agreements and MISO purchases are calculated utilizing specific GHG emission factors for the source, if known, or default emission factors from The Climate Registry for CO2, CH4 and N2O emissions. Biogenic CO2 emissions are excluded. Not included in this disclosure are emissions from upstream production of fuels (coal, oil, gas) purchased by Consumers Energy as applicable emission factors were unknown at the time of reporting.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
5

Please explain
Figure is estimated as we have limited data from suppliers.

Upstream transportation and distribution

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Emissions for upstream transportation of fuels (coal, oil, gas) through delivery to Consumers Energy, as well as fugitive and line loss emissions from transmission and distribution of purchased electricity, were not calculated as applicable emission factors were unknown at the time of reporting.

Waste generated in operations

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Emissions for segregated waste streams have not been calculated as applicable emission factors were not unknown at the time of reporting.

Business travel

Evaluation status
Relevant, calculated

Metric tonnes CO2e
1140

Emissions calculation methodology
Business travel (airfare and auto rental only) was reported for all of CMS Energy employees, including Consumers Energy employees. Business travel associated with contractor-owned vehicle mileage was not included. Employee expensed business mileage was included in Scope 1 emissions with estimated emissions from company-owned vehicles.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
Information provided is from vendors for airline and auto-rental agencies.

Employee commuting

Evaluation status
Relevant, calculated

Metric tonnes CO2e
963

Emissions calculation methodology
Incomplete information was available to calculate emissions for all Consumers Energy employees. Emissions were calculated for employee commuting based on participating Employee Assigned Vehicle Program (EAVP) mileage records.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Data was calculated based on employee reported commute mileage.

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
No upstream leased assets.

Downstream transportation and distribution

Evaluation status
Relevant, calculated

Metric tonnes CO2e
0

Emissions calculation methodology
Emissions for downstream transportation and distribution are captured and reported in Scope 1 emissions. Distribution losses of electric are accounted for in total electric generation and fugitive emissions are calculated and reported for natural gas distribution to customers.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Emissions for downstream transportation and distribution are captured and reported in Scope 1 emissions. Distribution losses of electric are accounted for in total electric generation and fugitive emissions are calculated and reported for natural gas distribution to customers.

Processing of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
No additional processing of sold products takes place.

Use of sold products

Evaluation status
Relevant, calculated

Metric tonnes CO2e
15422689

Emissions calculation methodology
40 CFR Part 98 Subpart NN reported emissions represent the annual CO2e emissions from the complete combustion of the total volume of natural gas distributed to Consumers Energy end users, with the exception that these emissions do not include emissions from large customer end users who consume more than 460,000 Mscf/year of natural gas (these large customer end users must report their own associated GHG emissions per 40 CFR Part 98 and as their Scope 1 emissions data).

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Calculated in accordance with 40 CFR Part 98 Subpart NN.

End of life treatment of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Not applicable to electric or natural gas sales.

Downstream leased assets

Evaluation status
Not evaluated

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Emissions attributed to assets placed under finance lease have not been evaluated to determine relevance.

Franchises

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
The Company’s business model does not include franchises.

Investments

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
The Company’s business model does not include investments.

Other (upstream)

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
No additional upstream sources.

Other (downstream)

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
No additional downstream sources.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?
No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure
0.0021

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
13512673

Metric denominator
unit total revenue

Metric denominator: Unit total
6376000000

Scope 2 figure used
Location-based

% change from previous year
3.89

Direction of change
Increased

Reason for change
Slight increase in 2019 CO2e emissions and slight decrease in 2019 total revenue results in increased intensity.

Intensity figure
1768

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
13512673

Metric denominator
full time equivalent (FTE) employee

Metric denominator: Unit total
7642

Scope 2 figure used
Location-based

% change from previous year
0.38

Direction of change
Increased

Reason for change
Slightly larger increase in 2019 CO2e emissions and a slight increase in 2019 FTEs results in increased intensity.

Intensity figure
0.794

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
13512673

Metric denominator
megawatt hour generated (MWh)

Metric denominator: Unit total
17020000

Scope 2 figure used
Location-based

% change from previous year
2.55

Direction of change
Increased

Reason for change
Slight increase in 2019 CO2e emissions and slight decrease in MWhs generated by Consumers Energy owned-generation results in increased intensity.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?
Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	13164825	Other, please specify (EPA emission factors: 40 CFR Part 98, Table A-1 to Subpart A)
CH4	288032	Other, please specify (EPA emission factors: 40 CFR Part 98, Table A-1 to Subpart A)
N2O	53780	Other, please specify (EPA emission factors: 40 CFR Part 98, Table A-1 to Subpart A)
SF6	2533	Other, please specify (EPA emission factors: 40 CFR Part 98, Table A-1 to Subpart A)

C-EU7.1b

(C-EU7.1b) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.

	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Gross Scope 1 SF6 emissions (metric tons SF6)	Total gross Scope 1 emissions (metric tons CO2e)	Comment
Fugitives	3043	11359	0.111	289563	40 CFR Part 98 Subpart W and Subpart DD reporting
Combustion (Electric utilities)	12936152	158	0	12992780	40 CFR Part 98 Subparts C & D. Total includes N2O
Combustion (Gas utilities)	111774	2	0	111889	40 CFR Part 98 Subpart C. Total includes N2O
Combustion (Other)	80622	2	0	114939	Business mileage of company-owned fleet vehicles & heat (gas) purchased from other utility providers. Total Includes N20
Emissions not elsewhere classified	0	0	0	0	None

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
United States of America	13509175

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By facility

C7.3b

(C7.3b) Break down your total gross global Scope 1 emissions by business facility.

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
JH Campbell Generating Facility	8285776	42.91	-86.2
DE Karn/JC Weadock Generating Facility	2034537	43.64	-83.84
Zeeland Generating Facility	1735721	42.82	-86
Freedom Compressor Station	18845	42.21	-83.97
Muskegon River Compressor Station	18244	44.08	-85.02
Northville Compressor Station	7021	42.48	-83.55
Overisel Compressor Station	15301	42.7	-85.95
Ray Compressor Station	17192	42.81	-82.87
St. Clair Compressor Station	19092	42.72	-82.72
White Pigeon Compressor Station	16193	41.8	-85.59
Jackson Generating Station	936746	42.25	-84.38

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions , metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility activities	12992780	<Not Applicable>	(need to complete)
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
United States of America	3499	0	5838	0

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Office facilities	3499	0

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Increased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	Not applicable.
Other emissions reduction activities	602843	Increased	1.9	Natural gas and electric energy efficiency programs and our voluntary methane reductions prevented the release of 602,842 metric tons of CO2e in 2019. This was an increase of 1.9% over emissions reductions achieved in 2018.
Divestment	0	No change	0	Not applicable.
Acquisitions	0	No change	0	Not applicable.
Mergers	0	No change	0	Not applicable.
Change in output	0	No change	0	Not applicable.
Change in methodology	0	No change	0	Not applicable.
Change in boundary	0	No change	0	Not applicable.
Change in physical operating conditions	0	No change	0	Not applicable.
Unidentified	294010	Increased	2.22	Minor year over year variations in emissions may be attributable to changes in capacity, plant outages (which can also translate into changes in output), weather events (changes in physical operating conditions) and/or customer demand, however given the lower percentage in year or year change it is difficult to pin-point the basis.
Other	0	No change	0	Not applicable.

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 75% but less than or equal to 80%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	17100000	17100000
Consumption of purchased or acquired electricity	<Not Applicable>	455	5383	5838
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	27040	<Not Applicable>	27040
Total energy consumption	<Not Applicable>	27495	17105383	17376682

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks)
Coal

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
10632078

MWh fuel consumed for self-generation of electricity
831261

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
0.97

Unit
metric tons CO2e per MWh

Emissions factor source
Total fuel MWh consumed by the organization reflects the station power used by electric generation units. MWh fuel consumed for self-generation of heat reflects natural gas consumed at compressor stations for auxiliary equipment. Any MWh associated with self-generated heat at electric generation units is reported within self-generation MWhs of electricity figure. Emission factors for fuel type are calculated from metric tons CO2e divided by MWh (gross) for specific fuel type for electric generation units.

Comment

Fuels (excluding feedstocks)
Natural Gas

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
6463367

MWh fuel consumed for self-generation of electricity
214413

MWh fuel consumed for self-generation of heat
55277

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
0.41

Unit
metric tons CO2e per MWh

Emissions factor source
Total fuel MWh consumed by the organization reflects the station power used by electric generation units. MWh fuel consumed for self-generation of heat reflects natural gas consumed at compressor stations for auxiliary equipment. Any MWh associated with self-generated heat at electric generation units is reported within self-generation MWhs of electricity figure. Emission factors for fuel type are calculated from metric tons CO2e divided by MWh (gross) for specific fuel type for electric generation units.

Comment

Fuels (excluding feedstocks)
Distillate Oil

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
0

Unit
metric tons CO2e per MWh

Emissions factor source
Oil is utilized as a fuel for generation however represents a de minims percentage of the gross generation (<0.05%). Emissions are reported with coal-fired electric generation do to co-location at the sites and thus a separate emission factor is not calculated.

Comment

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	17100444	1045674	950000	
Heat	0	55277	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C-EU8.2d

(C-EU8.2d) For your electric utility activities, provide a breakdown of your total power plant capacity, generation, and related emissions during the reporting year by source.

Coal – hard

Nameplate capacity (MW)
2043

Gross electricity generation (GWh)
10632

Net electricity generation (GWh)
9776

Absolute scope 1 emissions (metric tons CO2e)
10320313

Scope 1 emissions intensity (metric tons CO2e per GWh)
1056

Comment
Absolute Scope 1 emissions of CO2e are inclusive of the Karn site, which utilizes distillate oil & natural gas. CO2e emissions and emissions intensity figures are included in this source as overall the oil and gas generation represents less than 1% of the total GWh for this category.

Lignite

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
Non applicable

Oil

Nameplate capacity (MW)
701

Gross electricity generation (GWh)
5

Net electricity generation (GWh)
5

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
CO2e emissions reported with Coal as part of coal generating site and oil generation is de minimis.

Gas

Nameplate capacity (MW)
2318

Gross electricity generation (GWh)
6463

Net electricity generation (GWh)
6289

Absolute scope 1 emissions (metric tons CO2e)
2672467

Scope 1 emissions intensity (metric tons CO2e per GWh)
425

Comment

Biomass

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
Non applicable

Waste (non-biomass)

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
Non applicable

Nuclear

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
Non applicable

Fossil-fuel plants fitted with CCS

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
Non applicable

Geothermal

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
Non applicable

Hydropower

Nameplate capacity (MW)
1141

Gross electricity generation (GWh)
459

Net electricity generation (GWh)
204

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Wind

Nameplate capacity (MW)
332

Gross electricity generation (GWh)
756

Net electricity generation (GWh)
741

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Solar

Nameplate capacity (MW)
4

Gross electricity generation (GWh)
5.4

Net electricity generation (GWh)
5

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Marine

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
Non applicable

Other renewable

Nameplate capacity (MW)
1.1

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
Nameplate capacity includes 1.1 MW for battery storage

Other non-renewable

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
Non applicable

Total

Nameplate capacity (MW)
6541

Gross electricity generation (GWh)
18321

Net electricity generation (GWh)
17020

Absolute scope 1 emissions (metric tons CO2e)
12992780

Scope 1 emissions intensity (metric tons CO2e per GWh)
763

Comment
Scope 1 emission intensity is calculated for electric utility generation emissions only.

C-EU8.4

(C-EU8.4) Does your electric utility organization have a transmission and distribution business?
Yes

C-EU8.4a

(C-EU8.4a) Disclose the following information about your transmission and distribution business.

Country/Region
United States of America

Voltage level
Transmission (high voltage)

Annual load (GWh)
35686

Annual energy losses (% of annual load)
7.4

Scope where emissions from energy losses are accounted for
Scope 1

Emissions from energy losses (metric tons CO2e)
1317150

Length of network (km)
130521

Number of connections
1800000

Area covered (km2)
73350

Comment
Consumers owns and operates electric generation, transmission and distribution facilities. Information provided is for both the transmission and distribution system.

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description
Land use

Metric value
1508

Metric numerator
1508

Metric denominator (intensity metric only)
N/A

% change from previous year
98

Direction of change
Increased

Please explain
In 2018, the Company established a set of planet goal including a goal for land, water, waste and air performance. The land goal was to enhance, protect or restore 5,000 acres of land in five year, 2018-2022. The Company impacted 761 acres in 2018 and 1.508 acres in 2019. Protecting, restoring, and enhancing land can have a positive impact on natural carbon sequestration.

Description
Waste

Metric value
3244

Metric numerator
3244

Metric denominator (intensity metric only)
N/A

% change from previous year
10

Direction of change
Decreased

Please explain
In 2018, the Company established a set of planet goals including a goal for land, water, waste and air performance. The waste goal is to reduce Company waste 35% from a 2017 baseline by the end of 2022. The Company generated 29,545 tons of waste in 2017. In 2019, the Company generated 26,301 tons of waste. Reducing our waste reduces the number of waste pickups and reducing the amount of time trucks are on the road picking up and disposing of waste.

C-EU9.5a

(C-EU9.5a) Break down, by source, your total planned CAPEX in your current CAPEX plan for power generation.

Primary power generation source	CAPEX planned for power generation from this source	Percentage of total CAPEX planned for power generation	End year of CAPEX plan	Comment
Other, please specify (Renewables)	1766000000	63.4	2024	Capital Investment is over the years 2020 through 2024. Percent's are based on total electric generation investment.
Gas	159000000	5.7	2024	Capital Investment is over the years 2020 through 2024. Percent's are based on total electric generation investment.
Coal – hard	473000000	17	2024	Capital Investment is over the years 2020 through 2024. Percent's are based on total electric generation investment.
Other, please specify (Other, including decommissioning)	387000000	13.9	2024	Capital Investment is over the years 2020 through 2024. Percent's are based on total electric generation investment.

C-EU9.5b

(C-EU9.5b) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).

Products and services	Description of product/service	CAPEX planned for product/service	Percentage of total CAPEX planned products and services	End of year CAPEX plan

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	

C-CO9.6a/C-EU9.6a/C-OG9.6a

(C-CO9.6a/C-EU9.6a/C-OG9.6a) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (optional)	Comment
Unable to disaggregate by technology area	<Not Applicable>	Please select	4275304	Comment The Company spent R & D funds on 8 Electric Power Research Institute initiatives and 16 other initiatives in 2019.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Consumer Energy 2020 GHG Verification Statement_20200824.pdf

Page/ section reference
Pages 1-3

Relevant standard
Other, please specify (Environmental Resources Trust Corporate GHG Verification Guideline)

Proportion of reported emissions verified (%)
97

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach
Scope 2 location-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Consumer Energy 2020 GHG Verification Statement_20200824.pdf

Page/ section reference
Pages 1-3

Relevant standard
Other, please specify (Environmental Resources Trust Corporate GHG Verification Guideline)

Proportion of reported emissions verified (%)
75

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category
Scope 3: Use of sold products

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Consumer Energy 2020 GHG Verification Statement_20200824.pdf

Page/section reference
Pages 1-3

Relevant standard
Other, please specify (Environmental Resources Trust Corporate GHG Verification Guideline)

Proportion of reported emissions verified (%)
100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?
No, but we are actively considering verifying within the next two years

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?
No, and we do not anticipate being regulated in the next three years

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?
Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

Credit origination or credit purchase
Credit origination

Project type
Other, please specify (Hydroelectric, Solar, Wind, Pumped Storage)

Project identification
Various Consumers Energy owned renewable energy systems. Credits canceled.

Verified to which standard
Other, please specify (Michigan Public Service Commission Act 295 of 2008)

Number of credits (metric tonnes CO2e)
1459966

Number of credits (metric tonnes CO2e): Risk adjusted volume
0

Credits cancelled
Yes

Purpose, e.g. compliance
Compliance

Credit origination or credit purchase
Credit origination

Project type
Other, please specify (Hydroelectric, Solar, Wind, Pumped Storage)

Project identification
Various Consumers Energy owned renewable energy systems. Credits not canceled.

Verified to which standard
Other, please specify (Michigan Public Service Commission Act 295 of 2008)

Number of credits (metric tonnes CO2e)
13990

Number of credits (metric tonnes CO2e): Risk adjusted volume
0

Credits cancelled
No

Purpose, e.g. compliance
Compliance

Credit origination or credit purchase
Credit purchase

Project type
Other, please specify (Landfill Gas, Wind, Hydroelectric, Anerobic Digester, Biomass, Solar, Municipal Solid Waste)

Project identification
Various renewable energy systems. Credits canceled.

Verified to which standard
Other, please specify (Michigan Public Service Commission Act 295 of 2008)

Number of credits (metric tonnes CO2e)
1937835

Number of credits (metric tonnes CO2e): Risk adjusted volume
0

Credits cancelled
Yes

Purpose, e.g. compliance
Compliance

Credit origination or credit purchase
Credit purchase

Project type
Other, please specify (Landfill Gas, Wind, Hydroelectric, Anerobic Digester, Biomass, Solar, Municipal Solid Waste)

Project identification
Various renewable energy systems. Credits not canceled.

Verified to which standard
Other, please specify (Michigan Public Service Commission Act 295 of 2008)

Number of credits (metric tonnes CO2e)
20306

Number of credits (metric tonnes CO2e): Risk adjusted volume
0

Credits cancelled
No

Purpose, e.g. compliance
Compliance

C11.3

(C11.3) Does your organization use an internal price on carbon?
No, but we anticipate doing so in the next two years

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?
Yes, our customers
Yes, other partners in the value chain

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement
Collaboration & innovation

Details of engagement
Run a campaign to encourage innovation to reduce climate change impacts

% of customers by number

% of customer - related Scope 3 emissions as reported in C6.5

Portfolio coverage (total or outstanding)
<Not Applicable>

Please explain the rationale for selecting this group of customers and scope of engagement
Consumers Energy uses an integrated marketing approach to engage customers in our Energy Efficiency Programs. We have prioritized customer engagement due to its inherent business and societal value. This engagement reduces carbon emissions while creating business value through new products and services. Additionally, our energy efficiency programs save our customers money

Impact of engagement, including measures of success
Ultimately, our engagement efforts are evaluated by the achievement of savings goals for both electricity and natural gas. By improving the energy efficiency of Michigan homes and businesses, from 2009 through 2019, Consumers Energy has helped its customers save over 17,380 GWh of electricity and 92,145 MMCF of natural gas, enough to power over 2 million homes and heat 1.7 million Midwest homes for a year.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Consumers Energy believes the basis of our sustainability efforts should be founded on what both we and our stakeholders deem to be most important. To do this we have conducted a materiality assessment to help shape our sustainability efforts. Additionally, in 2018 Consumers Energy announced new corporate wide planet goals. the Company met with key stakeholders including customers, state and local government, United Tribes of Michigan, non-governmental organizations, trade associations and Universities to engage them collaboratively and get input and feedback on what environmental issues we should be focusing on. The results of these meetings and surveys were compiled and became the basis for the goals set for all environmental media, including water, for the next five years. In 2019, we revisited engagement around our planet goals by holding a meeting with a variety of Michigan based environmental non-governmental organizations to share our progress and solicit feedback on our environmental goals and initiatives including emission reduction efforts and integrated resource plan. In addition, every 3 years when we do our Integrated Resource Plan to determine our generation mix for the next 20 years we hold numerous stakeholder outreach meetings around the state of Michigan to gather input.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Direct engagement with policy makers

Trade associations

Funding research organizations

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Other, please specify (Clean energy generation)	Support	In 2016, the State of Michigan passed new state energy policy, which became effective in April 2017. Consumers Energy staff participated in this research process via roundtable discussions, workgroups, and public presentations. Staff now are in the implementation phase of those new programs.	Consumers Energy supports the enacted state energy policy. We will continue to engage in legislative workgroups and discussions to best implement the revised mandates on utilities for energy efficiency and renewable energy.
Other, please specify (Carbon pricing)	Neutral	The Company has engaged with policymakers on various pieces of carbon pricing legislation in Congress. This engagement has been minimal, as serious discussions within Congress have not begun.	In general, we have provided comments on the legislation without actively supporting or opposing.

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association

American Gas Association (AGA)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

AGA believes that every discussion about clean energy standards should include natural gas—and that energy efficiency and reduced environmental impacts be considered primary criteria for the nation's climate and energy policies.

How have you influenced, or are you attempting to influence their position?

Consumers Energy participates in policy development activities as well as technical support activities initiated through AGA.

Trade association

Electric Power Research Institute (EPRI)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

EPRI acknowledges that the energy industry is faced with unprecedented uncertainties around environmental regulation and climate policies. They have committed to developing tools and models to assist both the public and private sector decision makers in understanding the costs and benefits of policy alternatives.

How have you influenced, or are you attempting to influence their position?

Consumers Energy participates in policy development activities as well as technical support activities initiated through EPRI.

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?

No

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

To ensure a common approach to multiple climate engagement activities across business divisions and geographies consistent with our strategy on climate change, Consumers Energy has staff that tracks and analyses developments around climate change strategy. This group is housed in the corporate Environmental Services Department. Additionally, we have Governmental Affairs staff that regularly engages with policy makers. There is regular contact between the respective teams to discuss Company activities that may impact our climate change strategy.

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication
In mainstream reports

Status
Complete

Attach the document
2020AnnualReport.pdf

Page/Section reference
37, 51-52, 75, 79

Content elements
Governance
Strategy
Risks & opportunities
Emission targets

Comment
Annual Report (10k)

Publication
In voluntary communications

Status
Complete

Attach the document
Climate_Assessment_Report.pdf

Page/Section reference
Pages 1-15

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment
Our Climate Assessment Report incorporates TCFD guidelines.

Publication
In voluntary sustainability report

Status
Complete

Attach the document
sustainability-one-pager-2020.pdf

Page/Section reference
Pages 1-2

Content elements
Strategy
Emission targets

Comment
Our 2019 sustainability summary report.

C15. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

Additional information on RECs purchased and originated is attached.
RECs_2019 originated purchased.xlsx

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Executive Director, Environmental, Sustainability and Laboratory Services	Environment/Sustainability manager

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	6376000000

SC0.2

(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?

Yes

SC0.2a

(SC0.2a) Please use the table below to share your ISIN.

	ISIN country code (2 letters)	ISIN numeric identifier and single check digit (10 numbers overall)
Row 1	US	US12589610

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Requesting member
General Motors Company

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
274373

Uncertainty (±%)
1

Major sources of emissions
Generation of electricity supplied to GM (excludes MWh for Large Customer Renewable Energy Program)

Verified
Yes

Allocation method
Other, please specify (Allocation based on MWh of CE owned electric generation)

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
This value is calculated from the metered electricity usage for the GM customer accounts and a Consumers Energy specific emissions factor for electricity from our CE-owned generation assets. MWh associated with the Large Customer Renewable Energy Program are excluded from the CO2e emission calculation.

Requesting member
General Motors Company

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
3554

Uncertainty (±%)
1

Major sources of emissions
Natural gas sold to GM

Verified
Please select

Allocation method
Allocation based on the volume of products purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
This value is calculated from the metered Consumers Energy natural gas sold to GM customer accounts and an EPA Part 98 GHG emissions factors and equations. Only CE gas sales is utilized for CO2 emissions for Scope 3 end use combustion of natural gas.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

Scope 3: 40 CFR Part 98 equations

Equation C-1 of Subpart C of Part 98: CO2 = 1x10-3 x Fuel (scf) x HHV (MMBtu/scf) x EF (kg CO2/MMBtu)

Equation C-8 of Subpart C of Part 98: CH4 or N2O = 1x10-3 x Fuel (scf) x HHV (MMBtu/scf) x EF (kg CH4 or N2O/MMBtu)

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Other, please specify	The nature of supplying energy to a regional base (Midcontinent Independent System Operator, Inc. (MISO) prevents Consumers Energy from being able to calculate customer specific emission factors. For CDP requests, we calculate a Consumers Energy specific emission factor from all our generation sources emission profiles (Scope 1 electric utility emissions) however this does not account for our entire portfolio of delivered energy as it excludes our power purchase agreements and market purchases (Scope 3).

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

No

SC1.4b

(SC1.4b) Explain why you do not plan to develop capabilities to allocate emissions to your customers.

We currently provide our calculated utility average emission rate (lbs CO2/MWh) for electricity delivered from Consumers Energy to Edison Electric Institute (EEI) for ESG reporting, as well as provide an update on emission rates from our owned generation asset to our customers twice a year and as requested. We do not have current plans to expand upon our capabilities but will continue to work with our customers who are seeking this information.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

No

SC3.1

(SC3.1) Do you want to enroll in the 2020-2021 CDP Action Exchange initiative?

No

SC3.2

(SC3.2) Is your company a participating supplier in CDP's 2019-2020 Action Exchange initiative?

No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

No, I am not providing data

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission	Are you ready to submit the additional Supply Chain Questions?
I am submitting my response	Investors Customers	Public	Yes, submit Supply Chain Questions now

Please confirm below

I have read and accept the applicable Terms